ABSTRACT:

The invention relates to an encoding method for the compression of a video sequence by means of a tridimensional wavelet transform. This method is based on a hierarchical subband encoding process leading to transform coefficients constituting a hierarchical pyramid. A spatio-temporal orientation tree, in which the roots are formed with the pixels of the approximation subband and the offspring of each of these pixels is formed with the pixels of the higher subbands, defines the spatio-temporal relationship inside said pyramid. According to the invention, the initial subband structure of the wavelet transform is preserved, in the encoding process, by scanning the subbands one after the other in an order that respects the parent-offspring dependencies formed in the tree. Moreover, flags " off / on " are added to each coefficient of the tree in view of a progressive transmission of the most significant bits of the coefficients, at least one of them describing the state of a set of pixels and at least another one describing the state of a single pixel.